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EXAMINER

HALL, ARTHUR O

ART UNIT

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3714

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/697,054	Applicant(s) EMORI ET AL.	
	Examiner ARTHUR O. HALL	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Examiner acknowledges applicants' amendment of claims 1, 3 and 7-8, cancellation of claim 2 and addition of claims 12-14 in the Request for Continued Examination dated 1/17/2008 in response to Final Office Action dated 8/28/2007. Claims 1 and 3-14 are pending in the application and subject to examination as part of this office action.

Examiner acknowledges that applicants arguments in the Request for Continued Examination dated 1/17/2008 directed to the rejection set forth under 35 U.S.C. 103(a) in the Final Office Action dated 8/28/2007 are deemed moot in light of a new ground of rejection under 35 U.S.C. 103(a) as set forth below in view of applicants amendments and in view of applicants arguments.

However, Examiner deems applicants' three advantages with respect to 1) a front illumination device being capable of securing light for the first and second display devices allowing an image displayed on the first display device to be superimposed over an image displayed on the second display device, 2) a light guide plate disposed over the entire rear surface of a liquid crystal panel or shutter that disperses light equally over the entire surface of the liquid crystal panel or shutter preventing the coloring or definition of an image shown in the liquid crystal panel or shutter from being visually different over the entire rear surface, and 3) a reflection plate having light transmission properties at its front side that provides sufficient amounts of light for the liquid crystal

panel or shutter to make images clearly viewable on the liquid crystal panel or shutter to be made feasible by the structural features disclosed by Muir et al. (US Patent Application Publication 2005/0192090; hereinafter Muir), Ozaki et al. (US Patent Application Publication 2001/0031658; hereinafter Ozaki) and Inoue (US Patent 7,214,132) as described below.

Examiner acknowledges applicants' amendments obviate Examiners objection of claims 7 and 8 set forth in the Final Office Action dated 8/28/2007. Therefore, Examiner withdraws further objection to the claim.

Claim Objections

Claim 14 is objected to because of the following informalities: the claim recites "a beneficial state advantages;" however, this term is not in proper grammatical form. Examiner suggests that applicants either remove the term "advantages" or clarify why the term "advantages" has meaning as recited and place the term in proper grammatical form. Examiner believes that applicants recited the term "advantages" in the claims in error. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 3-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muir in view of Ozaki, and even further in view of Inoue.

Regarding claims 1, 3, 7-8 and 12-14, Muir teaches
a gaming machine (paragraph 0040 and Fig. 1, 10, Muir) comprises:
a game result display device for displaying a game result thereon (paragraphs 0041, 0048 and 0058 and Fig. 8, 14, 68, Muir; a display includes reels and an LCD having an LCD monitor provided for displaying plural symbols that determine winning or non-winning symbol combinations); and
a beneficial state generating device for generating a beneficial state for a player when a predetermined game result is displayed on the game result display device (paragraph 0045, Muir; a processor determines when to stop the display of symbols upon generation of a winning or non-winning combination of symbols to be displayed on the display);
wherein the game result display device includes
a first display device having a plurality of symbol display parts capable of variably displaying and stopping plural symbols, each of the symbol display parts having light transmittance, **or in other words**, a plurality of mechanical reels each of which has a reel sheet having light transmittance and plural symbols formed thereon, **or in other words**, the first display device includes a plurality of symbol display parts capable of

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variably displaying and stopping a single one or plural symbols, each of the plurality of symbol display parts having light transmittance (paragraph 0056 and Fig. 8, 18, Muir; a symbol carrying arrangement has reels with plural patterns or symbols disposed thereon) and

a second display device arranged in front of the first display device when seen from a front side of the gaming machine, the second display device being or is constructed from a liquid crystal display device including **or** provided with a liquid crystal panel, the liquid crystal panel having a plurality of symbol display areas corresponding to forward-most ones of the plurality of the symbol display parts of the first display device for selectively viewing the forward-most ones of the plurality of the symbol display parts through the plurality of symbol display areas, **or in other words**, a liquid crystal display device arranged in front of the reels, the liquid crystal display device having light transmitting areas each of which is disposed corresponding to each reel to see the symbols, **or in other words**, a liquid crystal display device arranged in front of the plurality of mechanical reels, the liquid crystal display device including a liquid crystal panel having a plurality of light transmitting areas, a respective one of the plurality of light transmitting areas corresponding to respective forward-most ones of the plurality of symbols, **or in other words**, a second display device arranged in front of a display area of the first display device when seen from a front side of the gaming machine, the second display device for displaying by superimposing on the first display device (paragraphs 0058 and 0061, Fig. 8, 68 and 76, Muir; a LCD includes LCD monitor disposed in front of the reels, a liquid crystal panel/shutter mechanism and a transparent panel/light guide plate that in combination superimpose or display images of the LCD monitor over images displayed on the reels),

a light guide device constructed from a transparent acrylic resin plate, the light guide device being arranged at a rear side of the liquid crystal panel, **or in other words**, a light guide plate constructed from a transparent acrylic resin plate arranged between the liquid crystal panel and the second illumination device, **or in other words**, a light guide device included in the second display device constructed from a liquid crystal display device is arranged over entire surface at a rear side of the liquid crystal

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panel (paragraph 0066 and Fig. 8, 84, Muir; a transparent panel or light guide plate is made of synthetic plastic material and acrylic resin is a type of synthetic plastic material), and

individual illumination devices arranged at side edges of the transparent acrylic resin plate of the light guide device for guiding light to the light guide device, **or in other words**, third illumination devices arranged at side edges of the transparent acrylic resin plate of the light guide plate for guiding light to the light guide plate, **or in other words**, an individual illumination device for generating light to be guided to the light guide device (paragraph 0066 and Fig. 8, 86, Muir; illuminating elements or individual/third illumination devices are disposed at the ends or side edges of a transparent panel to draw light off of the reels and into the transparent panel).

However, Muir does not substantially teach a reflection plate as claimed.

Therefore, attention is directed to Ozaki, which teaches

a reflection device for reflecting light guided to the light guide device, **or in other words**, a reflection plate arranged between the light guide plate described above and the second illumination device described below, **or in other words**, a reflection device for reflecting the light guided to the light guide device toward the liquid crystal panel positioned at a front side of the light guide device (paragraphs 0045 and 0138 and Fig. 28, 9, 25 and 24, Ozaki; a reflection plate is disclosed as being disposed between a light source and LCD Device that includes a transparent EL panel or light guide plate),

wherein areas of the reflection device corresponding to the symbol display parts of the first display device are made as light transmitting parts so that the light passed through the symbol display parts reaches to the liquid crystal panel, **or in other words**, the reflection plate has a reflection area for reflecting the light guided to the light guide plate by the third illumination device toward the liquid crystal panel and the light transmitting areas for passing through the light from the first illumination device, **or in other words**, the reflection device includes a reflection area for reflecting light and a

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light transmission area provided in front of each of the plurality of symbol display parts, the light transmission area for transmitting light (paragraph 0046, Ozaki); and

wherein a common illumination device is provided for illuminating the first display device and the second display device in common, the common illumination device including a front illumination device for illuminating the first display device from a front side thereof and the liquid crystal panel from a rear side thereof, **or in other words**, a second illumination device arranged between the reels and the liquid crystal display device, wherein the second illumination device illuminates the symbols on the reel sheets from front sides of the reels and the liquid crystal display device, **or in other words**, a second illumination device arranged between the reels and the liquid crystal display device, wherein the second illumination device illuminates the symbols on the reel sheets from front sides of the reels and the liquid crystal display device (paragraphs 0113 and 0138 and Figs. 17, 27 and 28, 9, Ozaki; a fluorescent lamp or second illumination device, arranged between the transparent LCD device and rotational reel display device, illuminates the symbols disposed on the reels from the front side of the reels).

All of the features or components required to obtain a display and common illumination device including a front illumination device are known in Muir and Ozaki. The only difference is the combination of the "old elements" into a single device through mounting a light source and reflection plate external to the reels along with other display features described above that are mounted external to the reels that would produce the reflective properties required to provide sufficient light to the liquid crystal panel or shutter so that images on the shutter are clearly viewable and obtain light for the reels and LCD monitor so as to allow an image displayed on the reels to be superimposed over an image displayed on the LCD monitor.

Thus, it would have been obvious to one having ordinary skill in the art at the time applicants' invention was made to arrange the light source above the reflective plate disposed external to the reels as taught by Ozaki in alignment with the LCD monitor, transparent panel and shutter as taught by Muir because the alignment is not dependent on any particular structural change to functionally ensure that the light reflected off of the reels and directed through the reflective plate via the light source passes through to the shutter, transparent panel and LCD monitor in order for the symbols to be displayed to the player.

However, Muir alone or in combination with Ozaki does not substantially teach a common illumination device including rear or first illumination device features as claimed.

Therefore, attention is directed to Inoue, which teaches the common illumination device includes a rear illumination device arranged within the first display device for illuminating the first display device from a rear side thereof and the liquid crystal panel by light passed through the symbol display parts, **or in other words**, a first illumination device arranged within each reel, wherein the first illumination device illuminates the symbols on the reel sheets from rear sides of the reels and the light transmitting areas on the liquid crystal display device by light passed through the reel sheets, **or**, a plurality of first illumination devices, a respective one of the plurality of first illumination devices being arranged within a respective one of the plurality of mechanical reels, wherein the first illumination device illuminates the symbols on the reel sheets from rear sides of the reels and the light transmitting areas on the liquid crystal display device by light passed

through the reel sheets, **wherein** the rear illumination device including a plurality of matrices of LED's, each matrix of LED's arranged in a plurality of rows of LED's and a plurality of columns of LED's, a respective matrix of LED's sized to correspond to a respective one of the plurality of symbol display areas of the liquid crystal panel and respective ones the forward-most ones of the plurality of the symbol display parts of the first display device associated with the respective one of the plurality of symbol display areas, **or in other words, wherein** each first illumination device includes a matrix of LED's arranged in a plurality of rows of LED's and a plurality of columns of LED's, the matrix of LED's sized to correspond to a respective one of the plurality of light transmitting areas of the liquid crystal panel and respective ones the forward-most ones of the plurality of symbols associated with the respective one of the plurality of light transmitting areas, **and, wherein** each of the plurality of symbol display parts being positioned between the second display device and the common illumination device (column 4, lines 8-18, Fig. 2, 27-29 and Fig. 3, Inoue; plural light or LED sources or rear/first illumination devices configured in 3x3 array or matrix form are disposed within each reel to transmit light from the rear past the symbols disposed on the surface of the reels).

All of the features or components required to obtain a display and common illumination device including a front and rear illumination devices are known in Muir, Ozaki and Inoue. The only difference is the combination of the "old elements" into a single device through mounting plural light or LED sources internal to the reels along with other display features described above that are mounted external to the reels that

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would allow the light guide plate to disperse light evenly over the entire surface of the liquid crystal panel or shutter to prevent the image tone shown in the shutter from being visually different when displayed over the shutter surface.

Thus, it would have been obvious to one having ordinary skill in the art at the time applicants' invention was made to arrange the light or LED sources disposed internal to the reels as taught by Inoue in alignment with the light source, reflective plate, LCD monitor, transparent panel and shutter as taught by Muir and Ozaki because the alignment is not dependent on any particular structural change to functionally ensure that the light transmitted through the reels and directed through the reflective plate via the light or LED sources passes through to the shutter, transparent panel and LCD monitor in order for the symbols to be displayed to the player.

Regarding claims 5-6 and 9-11, Ozaki teaches

Regarding claim 5,

a game start instruction device is operable by a player (paragraphs 0113, Ozaki; stop switches are operated by a player);

a game internal winning combination determination device determines an internal winning combination based on an output from the game start instruction device (paragraphs 0071-0073 and 0113, Ozaki; a CPU or processor determines the winning combination); and

a game result display control device conducts display control of the game result display device based on a determined result by the internal winning combination determination device (paragraphs 0063-0064, 0071-0073 and 0113, Ozaki; a processor

controls display of the game result or match or outcome of symbols combinations based on a win condition);

wherein the game result display control device turns off all illumination devices included in the common illumination device in a case that the internal winning combination determination device determines a predetermined combination as the internal winning combination (paragraphs 0071-0073 and 0136, Ozaki; on-off control by a processor for luminescence of the LCD device is provided based on winning combinations of symbols).

Regarding claim 6, the illumination device included in the common illumination device is able to variably display the symbols (paragraph 0071, Ozaki; variable display of patterns or symbols is provided based on illumination of symbols for a winning or no-winning condition).

Regarding claims 9 and 10,

a processor controls the reels, the first illumination device and the second illumination device **or** the first illumination device, the second illumination device and the third illumination device (paragraphs 0063-0064, 0071-0073, 0113, Ozaki; it would have been obvious at the time of invention to include a light source disposed within the reels for the same reasons described above);

wherein the processor selects the symbols to be stopped and displayed, determines based on the selected symbols whether or not a symbol combination is won and stops the reels (paragraphs 0063-0064, 0071-0073 and 0113, Ozaki; a stop pattern selection means is disclosed), and

wherein the processor turns off at least one of the first illumination device and the second illumination device **or** the first illumination device, the second illumination device and the third illumination device if the processor determines that the symbol combination is won (paragraphs 0063-0064, 0071-0073 and 0136, Ozaki; it would have been obvious at the time of invention to include a light source disposed within the reels

for the same reasons described above).

Regarding claim 11,

the first illumination device and the second illumination device functions as an illumination device to illuminate the symbols on the reel sheets if liquid crystal in the light transmitting areas of the liquid crystal display device is not driven (paragraph 0074, Ozaki; if a winning combination is “not” displayed, patterns symbols are displayed by the transparent EL panels via plural light sources and it would have been obvious at the time of invention to include a light source disposed within the reels for the same reasons described above), and

the first illumination device and the second illumination device functions as an illumination device to illuminate the liquid crystal display device if the liquid crystal in the light transmitting areas of the liquid crystal display device is driven (paragraphs 0078-0079, Ozaki; if a winning combination is displayed, patterns symbols are displayed by the transparent EL panels via plural light sources and it would have been obvious at the time of invention to include a light source disposed within the reels for the same reasons described above).

The claimed features of claim 4 do not appear to be disclosed in Muir alone or in combination with Ozaki; therefore, attention is directed to Inoue, which teaches the liquid crystal panel is set to normally white (column 6, lines 19-32, column 6, line 59 to column 7, line 13 and column 7, lines 25-33, Inoue; a white light is normally emitted from all colored LEDs when symbols are stopped on winning lines and it would have been obvious at the time of invention to try an implementation in which the liquid crystal panel or shutter would allow emission of white light as a normal or standard setting since the shutter is configured to allow or disallow light, which is normally white, for images displayed on reels to be revealed to the player).

Response to Arguments

Regarding applicants' advantages concerning claims 1 and 3-14 rejected as unpatentable or obvious under 35 U.S.C. § 103(a):

Applicants state that the claimed invention has three advantages that are 1) a front illumination device is capable of securing light for the first and second display devices allowing an image displayed on the first display device to be superimposed over an image displayed on the second display device, 2) a light guide plate disposed over the entire rear surface of a liquid crystal panel or shutter disperses light equally or evenly over the entire surface of the liquid crystal panel or shutter preventing the coloring or definition of an image shown in the liquid crystal panel or shutter from being visually different over the entire rear surface, and 3) a reflection plate having light transmission properties at its front side provides sufficient amounts of light for the liquid crystal panel or shutter to make images clearly viewable on the liquid crystal panel or shutter.

Examiner submits that a light source, reflection plate, LCD monitor, transparent panel and shutter described above as being mounted external to the reels would produce the reflective properties required to provide sufficient light to the liquid crystal panel or shutter so that images on the shutter are clearly viewable, and obtain light for the reels and LCD monitor so as to allow an image displayed on the reels to be superimposed over an image displayed on the LCD monitor, thereby providing the

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stated advantages 1) and 3) because integration and alignment of these components disclosed in Muir and Ozaki is not dependent on any particular structural change to functionally ensure that the light reflected off of the reels and directed through the reflective plate via the light source passes through to the shutter, transparent panel and LCD monitor in order for the symbols to be displayed to the player.

Examiner further submits that a light source, reflection plate, LCD monitor, transparent panel and shutter described above as being mounted external to the reels and plural light or LED sources mounted internal to the reels would allow the light guide plate to disperse light evenly over the entire surface of the liquid crystal panel or shutter to prevent the image tone shown in the shutter from being visually different when displayed over the shutter surface, thereby providing the stated advantage 2) because integration and alignment of these components disclosed in Muir and Ozaki is not dependent on any particular structural change to functionally ensure that the light transmitted through the reels and directed through the reflective plate via the light or LED sources passes through to the shutter, transparent panel and LCD monitor in order for the symbols to be displayed to the player.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

B US-6,027,115, Griswold et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARTHUR O. HALL whose telephone number is (571)270-1814. The examiner can normally be reached on Mon - Fri, 8:00am - 5:00 pm, Alt Fri, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert E Pezzuto/
Supervisory Patent Examiner, Art Unit 3714

/A. O. H./
Examiner, Art Unit 3714